

AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph no. 18 with the following amended paragraph:

Any suitable method can be used for measuring the imaging system for the spatially resolving determination of wavefront errors, in particular suitable interferometric methods which permit direct determination of light path deviations via the exit pupil. For example, Twyman-Green methods or methods with a Fizeau structure or Mach-Zehnder structure can be used. Preference is given to methods which permit direct measurement of the wavefront aberration in the exit pupil for many field points at the same time. Such a method, which operates on the shearing interferometry principle, is described in German Patent Application DE 101-2909 929 A1, whose disclosure content in this regard is incorporated in this description by reference. It is also possible for many field points to be measured one after another. For example, the measurement of wavefront errors can be carried out for between about 10 and about 100 field points.

Please replace the paragraph no. 35 with the following amended paragraph:

All the entry surfaces and exit surfaces of the lenses are shaped in accordance with the original design of the projection objective. In the example, the entry surface 35 of the lens ~~13~~ 14 nearest to the pupil is curved spherically, but it can also be an aspherical surface which, in this case, is designated a design asphere, since the asphericity is provided within the context of the optical design in order to contribute to the correction of specific image errors of the system. The surface closest to the pupil can also be substantially flat.

Please replace the paragraph no. 39 with the following amended paragraph:

In the production of the finished, corrected projection objective, the procedure can be as follows, for example. Firstly, as described, the object is assembled from the individually mounted lenses, an element 14 close to the pupil initially remaining uncoated on the correction surface 35 provided for correction. The other lens surfaces are antireflection coated. The objective is then installed in the measuring apparatus 40, with which the adjustment operation is monitored. During the adjustment, the objective 10 is initially tuned in the conventional manner, for example the anamorphism being eliminated or at least minimized by rotating lenses. During this adjustment, however, no particular weight is placed on the compensation of the axial astigmatism (AIDA). As a result, the expenditure on time during the adjustment can be reduced considerably as compared with conventional procedures. The ~~interferometer~~ measuring apparatus 40 (e.g., an interferometer) is used to observe the effects of the adjustment actions on the wavefront.